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| 10/670,053 | 09/25/2003 | Yuusaku Ohta | 2003-1371A | 4723 |
| 513 7590 07/16/2007 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021 | | | EXAMINER MUI, GARY | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/670,053 | Applicant(s) OHTA ET AL. | |
| | Examiner Gary Mui | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2007.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,6 and 14-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1,5,6 and 14-20 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 1, 5, 6, and 14 – 20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1 and 14 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaumont et al. (US 6,959,333 B2) in view of Banerjee et al. (newly cited US 2003/0231629 A1).

For claim 1, Beaumont et al. teaches an acquiring unit operable to acquire a time-to-live of an IP packet received from the other communication device (see column 2 lines 8 – 11, content delivery server receives TTL from the DNS); a judging unit operable to judge whether the acquired time-to-live is less than or equal to a pre-stored comparison value (see column 2 lines 11 – 17, compares the TTL values to determine the shortest estimated distance); and a communication unit operable, to conduct content transmission/reception with the other communication device only when the judging unit has judged that the acquired time-to-live is less than or equal to the pre-stored comparison value (see column 2 lines 5 – 7, transmitting content with the shortest estimated distance). Beaumont et al. fails to teach to not conduct content transmission/reception with the other communication device when the judging unit has judged that the acquired time-to-live is not less than or equal to the pre-stored comparison value. Banerjee et al. form the same field of endeavor teaches that the TTL value is used to control the number of hops a packet is allowed to propagate and this would confine the packet to within a certain network (see paragraphs 0019, 0020, and 0086). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made not transmit/receive when the TTL value is not less than or equal to a pre-stored value as taught by Banerjee et al. into the device of Beaumont et al. The motivation for doing this is to secure the transmission from reaching unwanted users and to keep packet from wandering the network freely.

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For claims 14 and 15, Beaumont et al. teaches a method using a system for setting unit operable to set a time-to-live of an IP packet for transmission to the second communication device to a predetermined value (see column 7 lines 34 – 36, updating the TTL value) and an acquiring unit operable to acquire the time-to-live of the IP packet received from the first communication device (see column 2 lines 8 – 11, content delivery server receives TTL from the DNS); a judging unit to judge whether the acquired time-to-live is less than or equal to a pre-stored value (see column 2 lines 11 – 17, compares the TTL values to determine the shortest estimated distance); and a communication unit operable to conduct content transmission/reception with the first communication apparatus only when the judging unit has judged that the acquired time-to-live is less than or equal to the predetermined value (see column 2 lines 5 – 7, transmitting content with the shortest estimated distance). Beaumont et al. fails to teach to not conduct content transmission/reception with the other communication device when the judging unit has judged that the acquired time-to-live is not less than or equal to the pre-stored comparison value. Banerjee et al. from the same field of endeavor teaches that the TTL value is used to control the number of hops a packet is allowed to propagate and this would confine the packet to within a certain network (see paragraphs 0019, 0020, and 0086). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made not transmit/receive when the TTL value is not less than or equal to a pre-stored value as taught by Banerjee et al. into the method of Beaumont et al. The motivation for doing this is to secure the transmission from reaching unwanted users and to keep packet from wandering the network freely.

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For claims 16 and 17, Beaumont et al. teaches a computer-readable medium having recorded thereon a content distribution computer programming executing the method (see column 2 lines 43 – 45, the method is executed using conventional computer program techniques). Beaumont et al. fails to teach to not conduct content transmission/reception with the other communication device when the judging unit has judged that the acquired time-to-live is not less than or equal to the pre-stored comparison value. Banerjee et al. form the same field of endeavor teaches that the TTL value is used to control the number of hops a packet is allowed to propagate and this would confine the packet to within a certain network (see paragraphs 0019, 0020, and 0086). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made not transmit/receive when the TTL value is not less than or equal to a pre-stored value as taught by Banerjee et al. into the program of Beaumont et al. The motivation for doing this is to secure the transmission from reaching unwanted users and to keep packet from wandering the network freely.

Claim Rejections - 35 USC § 103

6. Claims 5, 6, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaumont et al. and Banerjee et al. as applied to claim 1 above, and further in view of Joyner et al. (US 2003/010825 A1).

For claim 5, Beaumont et al. and Banerjee et al. teaches all of the claimed subject matter with the exception of a key sharing unit operable to share key information with the other communication device. Joyner et al. from the same field of endeavor teaches one or more public keys are received from the device and then validated (see paragraph 0005 lines 2 – 3).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to include share key information as taught by Joyner et al. into the device of Beaumont et al. The motivation for doing this is to ensure that the data is secure and the device will be the only one who can read the data.

For claims 6 and 20, Beaumont et al. and Banerjee et al. teaches all of the claimed subject matter of the claimed invention with the exception of an encryption unit operable, using the shared key information, to encrypt contents and decrypt encrypted contents, wherein the communication unit transmits/receives encrypted contents; and the encryption unit performs encryption based on an Advance Encryption Standard. Joyner et al. form the same field of endeavor teaches the server encrypts the content and stores the encrypted content along with the encryption key in a data storage device. The present invention can use any desired standard or proprietary encryption process, such as a triple Data Encryption Standard ("3DES") algorithm, an Advanced Encryption Standard ("AES") algorithm, or a linear feedback shift register ("LFSR") sequence. The server may encrypt and store several versions of the same content. For example, the same movie could be made available in MPEG-2 and MPEG-4 formats. Moreover, each of these formats could be made available in more than one encrypted format, such as 3DES and AES. The server also authenticates the client 106 and provides the secure transmission link to the client via network. Once a client is properly authenticated, the server retrieves the requested content from the data storage device for delivery to the client (see paragraph 0027 lines 4 – 21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate

the encryption unit of Joyner et al. into the device of Beaumont et al. The motivation for doing this is to maintain a high level of security for sensitive information.

Claim Rejections - 35 USC § 103

7. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaumont et al. and Banerjee et al. as applied to claim 1 above, and further in view of the background of Ishiguro et al. (US 2003/0105956 A1).

For claims 18 and 19, Beaumont et al. and Banerjee et al. teaches all of the claimed subject matter with the exception of an invalidation information acquiring unit operable to acquire, via a network, invalidation information identifying an invalidated communication device, and a storage unit operable to store the invalidation information acquired by the invalidation information acquiring unit; a comparison unit operable to compare the acquired invalidation information and the invalidation information stored by the storage unit; and an updating unit operable, when the acquired invalidation information and the invalidation information stored by the storage unit do not match, to replace the stored invalidation information with the acquired invalidation information. Ishiguro et al. discloses in the background the private key of a user's device might be revealed; and an invalid user device might receive a content, storing that private key and pretending to be the invalid device. To cope with such a case, a key control center distributes a revocation list called invalid device list or blacklist containing IDs of invalid devices, to valid devices, and the valid devices use the revocation list to confirm whether ID of a communicating party is included in the list or not (see paragraph 0013). The revocation list is prepared by listing IDs of invalid devices and appending the

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signature of the key issuing center for preventing falsification. The revocation list is called CRL (certification revocation list), which is sequentially updated and distributed to the valid devices every time a new invalid device is generated (see paragraph 0014 lines 1 – 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a list of up to date invalid devices as disclosed in the background of Ishiguro et al. into the device of Beaumont et al. The motivation for doing this is by having and maintaining a blacklist of users there will be added security and will help in preventing illegal access.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary Mui whose telephone number is (571) 270-1420. The examiner can normally be reached on Mon. - Thurs. 9 - 3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GM



07.10.2007



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SUPERVISORY PATENT EXAMINER